MISCELLANEOUS NOTES

1. LIONS HUNTING A LEOPARD

I have just completed reading the very interesting book the Leopard in India --- A NATURAL HISTORY by J.C. Daniel, which was released on 4th October, 1996 at a function organised in New Delhi by WWF — India. I have interesting information to add which is very much in keeping with contemporary India. During one of my nature camps in the Gir Forest ten years ago, some sixty school boys from Rajkot camping beside Kamleshwar Temple in the Gir Forest were being guided to see a pride of lionesses. As they were walking along the jungle trail, there was considerable commotion among the dried teak leaves, and a leopard rushed towards the children chased by two full grown lions! With the group of humans in front and the lions in pursuit, the leopard, in full view of the boys, scaled a slender leafless teak tree. One of the lions, to the thrill of the boys, stood up on its hind legs against the tree looking up at the treed leopard. Both the lions then sat down below the tree as though to be admired by the ogling humans. Then a sound diverted the lions' attention towards the thickets in the ravine, and the leopard quickly descended from the tree and raced away up the hill. The lions had been distracted by the sound of the lionesses further along the path, which the boys were being taken to see. I myself had been looking at the lionesses. The experience was unbelievable and the discipline of the schoolboys was something to be proud of. Not one lad panicked and the group remained together quietly even as the leopard and the pursuing lions were rushing in their direction. It was heart warming to be surrounded later by the excited youngsters telling me of their great experience. The lionesses were forgotten as we walked back to Kamleshwar in the fading light of the winter sun. All the schoolboys are, today, committed conservationists.

Another frightening and equally notable episode was enacted four years ago. The Surat Nature Club annually arranges a nature camp for school children in the Dang Forest. I was to flag off the camp programme, but for some reason I could not leave Gandhinagar and postponed my visit by a couple of days, only to be advised that the camp had been abandoned, because on the fifth night one of the camp volunteers, just before turning in around midnight, had heard some noise.

On flashing his torch he found a leopard tugging at a blanket from one of the tents. The youth excitedly called his friends to see the cat. The animal dropped what he was tugging at and walked calmly to one side. The volunteers, on examining what the feline was trying to pull out discovered, to their horror, a 12 year old boy, fast asleep in the blanket. The boy, though he had fang marks on his leg where the big cat had got a grip on him, was blissfully unaware of the brush he had with death. What is amazing is that he continues to participate in the Club's activities with the wholehearted approval of his parents and the Dang camps are organised each year and are fully booked! 1996 was the eleventh consecutive year of the camp.

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2. THE CLOUDED LEOPARD IN MANIPUR AND NAGALAND

(With one text-figure)

The clouded leopard *Neofelis nebulosa* is vanishing from part of its wide range in southern

and southeastern Asia mainly due to habitat loss and poaching for its fur. Survey results have

Table 1
CLOUDED LEOPARDS RECORDED IN MANIPUR AND NAGALAND, 1988-1996

Date	Locality	Specimen	Remarks
April, 1988	Keilam Hill, Churachandpur district, Manipur		Reported from this proposed Wildlife Sanctuary by locals & Forest officials
April, 1988	Yangoupokpi Lokchao Chandel dist. Manipur	_	Reported by locals and Forest officials
February, 1992	Intanki, Wildlife Sanctuary, Kohima dist. Nagaland		Reported by locals and Forest officials.
January, 1996	Nungbi, Ukhrul dist. Manipur	_	Reported by locals; not uncommon.
January, 1996	Shirol proposed National Park, Ukhrul dist. Manipur	_	Reported by locals and Forest officials. Occurs up to 2585 m.
January, 1996	Anko Range, Ukhrul dist. Manipur	_	Not uncommon in this inaccessible and little disturbed range on the Indo-Myanmar border
January, 1996	Makru Reserve Forest, Tamenglong dist. Manipur	_	Reported by locals.
June, 1996	Suruhuto, Zunheboto dist. Nagaland	1 skin	Shot by a local Sema Naga tribal sometime back. The skin examined at DC's bungalow; measured: Head-and-body=95.0 cm; tail = 75.0 cm
June, 1996	Sukhai, Zunheboto dist. Nagaland	1 skin	Shot by the Sema Naga villagers of Sukhai from the secondary forest on the banks of Tizu river in early 1996.
June, 1996	Dhansiri Reserve Forest, Karbi Anglong dist. Assam	1 skin	Killed by a local Karbi tribal in May, 1996. Dhansiri is contiguous with Intanki of Nagaland
June, 1996	Satoi, Zunheboto, Tuensang and	_	Reported by locals and Government officials. OccursPhek districts, Nagaland above 2000 m; also at lower elevations.

reported them in recent years from Assam and parts of other states of northeastern India (Choudhury, 1993; Athreya and Johnsingh 1995).

Information on their distribution in Manipur and Nagaland is scarce. During general field surveys for wildlife in Manipur in 1988 and 1996, and Nagaland in 1992 and 1996, I collected information on the species which are summarised in Table 1.

During the surveys, a picture of the clouded leopard was shown to hunters and other knowledgeable villagers and forest officials and its size and habits were explained. While surveys of such elusive animals can never give completely accurate information on the status of the species, the records show that *N. nebulosa* is still widely distributed in the forested areas of Manipur and Nagaland. Shrinkage of habitat and felling have increased their encounters with villagers.

In areas such as Ukhrul district, the villagers of the Tangkhul Naga tribe were quite familiar with the cat, and clearly explained to me that it was the 'third' big cat of their area after the tiger *Panthera tigris* and the leopard *P. pardus*, and that it is mainly arboreal and preys mostly on monkeys.

The total potential habitat available for the clouded leopard in Manipur and Nagaland is about 8000 and 4000 sq. km respectively, of which only 185 sq. km in Manipur and 218 sq. km in Nagaland are inside protected areas. The protected areas are Yangoupokpi Lokchao in Manipur, Intanki (202 sq. km), Puliebadge (9.2 sq. km) and Fakim (6.4 sq. km) in Nagaland. Habitat type in the areas listed in Table 1 ranges from tropical moist deciduous and semi-evergreen in Intanki, tropical rain forest in northern Nagaland and southwestern Manipur to subtropical evergreen in the higher

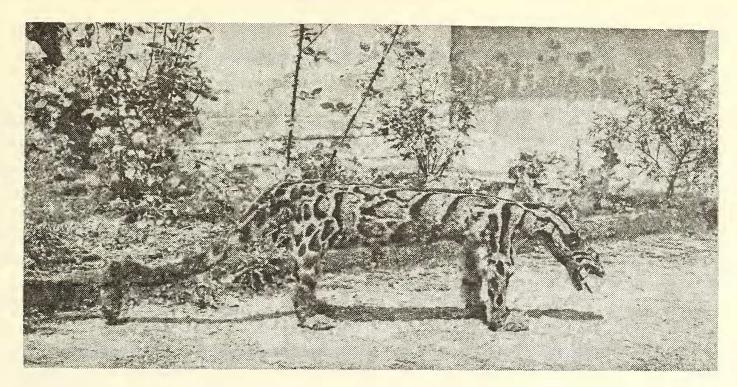


Fig. 1. Clouded leopard photographed in Zunheboto district of Nagaland.

areas such as Shiroi, Satoi and Saramati. The elevation of the recorded localities ranges from 200 m above msl in Intanki to more than 2400 m above msl in Shiroi and Satoi. All over its range in Manipur and Nagaland, the clouded leopard is sympatric with the tiger and the leopard.

The main threat to the species is deforestation, through indiscriminate felling of large and mature trees (where the clouded leopard gives birth to cubs and even hunts) and *jhum* or slash-and-burn shifting cultivation of the hill tribes. These tribes which dominate the entire Nagaland and hilly tracts of Manipur also eat its flesh whenever available.

As the larger part of the forest belongs to local tribes, setting up of protected areas is a difficult task. The proposed National Park at Shiroi and Wildlife Sanctuary at Keilam Hills in Manipur should be declared without further delay. Other areas recommended for protection are, Tolbung-Irangmukh-Vangai-Bongmukh (500 sq. km), Jiri-Makru (99 sq. km) and Anko

Range (400 sq. km) in Manipur, and Saramati-Fakim (500 sq. km) and Satoi (100 sq. km) in Nagaland.

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